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Force Deployment Planning & Execution: A Primer for Operational-Level Commands

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Summary

In recent years, the military has expressed a renewed interest in force deployment planning and execution (FDP&E). This renewed interest can be attributed, at least in part, to an increased awareness of deployment-related problems brought about by experiences in Desert Storm, Restore Hope, and other recent operations. These operations brought attention to FDP&E-related deficiencies that the military services either didn't know existed, or had previously ignored. Other factors have also played a role. For example, the nature of recent contingencies highlights the fact that we no longer always know who our next enemy will be, what threat they will pose, or where that enemy will come from. This uncertainty means that the ability to plan for and execute force deployment operations on short or no notice will become even more critical in future years.

We recently completed a study that addresses why FDP&E is a problem for the Marine Corps, and what it can do to fix the problem. In this report, we generalize the results from our study and discuss the implications of our findings for operating force commands across the different services. Specifically, we focus on the key actions that operational level commands need to take to improve their ability to conduct force deployment operations.

Key actions for improving FDP&E

Based on our research, we identified four key steps that operational-level commands can take to improve their ability to conduct FDP&E. We discuss each of these steps below.

Focus on understanding the process

First, we recommend that operational-level commands focus attention on educating their staffs on the FDP&E process. Our research shows that there are few officers or enlisted personnel in the operat-

ing forces that have even a rudimentary level of understanding of the FDP&E process. We also found that personnel who are filling FDP&E-related billets often arrive unprepared, with little training or education on the FDP&E process or the related tools used in the process.

As part of this study, we analyzed the FDP&E process as it is supposed to work in theory, and developed a model that summarizes the process in terms of 11 major activities, along with their associated tasks. We also developed a narrative of the process that can be used as an education tool for commanders and their staffs.

Recognize the common pitfalls

Second, we recommend that operational-level commands increase their awareness of the common mistakes that are made during force deployment operations, and take steps to avoid them. Recent history has shown a consistent pattern of FDP&E-related problems. From Desert Storm to Restore Hope to Uphold Democracy to Joint Endeavor, every service has experienced some of the same problems with force deployment operations.

Our research uncovered a set of ten recurring problems that operational level commands have experienced in recent operations. They include:

- Focusing prematurely on sourcing and phasing
- Providing inadequate force deployment planning guidance
- Entering inaccurate data into deployment databases
- Not following appropriate validation procedures
- Using notional data instead of actual unit data
- Building unofficial off-line deployment databases
- Getting lift through unofficial channels
- Making unauthorized deployment database changes
- Making unauthorized changes to load plans at the ports
- Failing to properly manifest units.

Later in the report, we will discuss what operational-level commands can do to avoid these pitfalls.

Prepare for Joint Task Force (JTF)-unique considerations

Third, we recommend that operational-level commanders and their staffs prepare for those special considerations that need to be addressed during JTF operations. As part of our study, we examined whether FDP&E-related problems in a JTF scenario differ from those experienced during more traditional scenarios (such as Desert Shield/Storm). Our principal finding was that the most serious JTF FDP&E-related problems are the same as those faced by the services in non-JTF contingencies. We also found no evidence that FDP&E staff functions vary considerably when staffs serve as a JTF or in their more traditional roles.

However, we did identify a number of JTF-unique considerations that operational-level commanders and their staffs need to keep in mind when preparing for JTF operations. These include:

- Operational control of unfamiliar forces
- Reliance on JTF augmentation
- JTF component deficiencies (staffing and expertise)
- The nature of recent JTF operations (short or no notice)
- Procedural differences in how services approach FDP&E.

Be proactive

Finally, we recommend that operational-level commands address these deficiencies by developing a proactive program to improve their ability to conduct force deployment operations. Our research shows that one of the keys to successful FDP&E is commander's attention. Without such attention and focus, initiatives to improve FDP&E within commands often languish. That said, there are some specific actions that commands can take to ensure that the FDP&E process works better for them. These include:

- Establishing a process owner for FDP&E within the command

- Clearly delineating staff section responsibilities for FDP&E-related functions
- Creating a cross-functional deployment cell for contingencies
- Integrating FDP&E training and education into exercises and routine deployments
- Ensuring that the command trains as they fight by doing it the same in peacetime as in wartime, to the extent possible
- Increasing FDP&E knowledge and awareness levels through professional military education programs
- Planning ahead by cleaning and scrubbing deployment databases and updating them on a regular basis
- Building a cadre of experienced force deployment planners to increase corporate knowledge across the command
- Using history wisely to avoid getting lulled into a false sense of security.

Introduction

Getting to the fight is a critical aspect of any crisis or contingency. The process by which the military gets its forces to the fight is known as force deployment planning and execution (FDP&E). In recent years, we have seen a renewed interest and focus on FDP&E. A number of different factors have contributed to this situation:

- Recent history has shown a consistent pattern of FDP&E-related problems. From Desert Storm to Restore Hope to Uphold Democracy to Joint Endeavor, every service has experienced similar problems with force deployment operations.
- These problems have been serious enough to merit visibility at the highest levels of command, from the Commander of the Joint Task Force (CJTF) during Restore Hope to the Commander in Chief (CINC) during Desert Storm to the Chairman, Joint Chiefs of Staff (CJCS) during Joint Endeavor.
- A renewed focus on joint operations has forced many commands to prepare for new roles as Joint Task Force (JTF) staffs. In some cases, these new roles require staffs to perform unfamiliar functions, many of which are FDP&E-related.

This renewed interest in FDP&E has also brought attention to FDP&E-related deficiencies that operational commands either didn't know existed, or had previously ignored.

We recently completed a study that addresses why FDP&E is a problem for the Marine Corps, and what it can do to fix the problem.[1] In this report, we generalize the results from our study of Marine Corps FDP&E, and highlight those that apply across the different military services. We have also focused attention on the operational level (as

1. The final study report is a two-volume set, one that contains the main text [1] and one that contains supporting appendixes [2].

opposed to focusing on results that apply only to the service headquarters level).[2] Specifically, we will discuss:

- The key themes that emerged from our analyses of Marine Corps FDP&E deficiencies
- The FDP&E process itself, and the various activities associated with the process
- Some common pitfalls encountered at the operational level that commands should try to avoid
- Some special considerations to keep in mind when commands are the designated JTF for an operation
- Some suggestions on specific actions operating force commands can take to improve their ability to conduct FDP&E.

2. By operational level, we are referring to operating force commands at the CINC service component level down to the deploying unit.

The key themes

We identified five key themes that emerged from our analyses of FDP&E-related problems in the Marine Corps. Although our research focused on Marine Corps problems, we suspect these themes will apply and resonate across all the services.

Perceptions of problems often differed from reality

We found that many Marines were familiar with the *symptoms* of the problem, but frequently misunderstood the *underlying causes* of those problems. For example, our research shows that Marines generally believe that part of the FDP&E problem can be attributed to the fact that officers who specialize in FDP&E don't get promoted, and as a result are leaving the Marine Corps in droves. But we found that neither of these perceptions is necessarily true. As another example, we found that Marines in the operating forces generally believe that the FDP&E process is broken because nobody is willing to put in the time to fix it. However, our research shows the opposite to be true: we found many Marines across the Corps who devote enormous amounts of their time and energy to fix these problems.

Efforts to fix problems have been fragmented and stovepiped

Although much time and effort has been expended to fix some of these problems, we found that many of these efforts have been largely ineffective because they were not well-coordinated. This "fragmentation of effort" has resulted in duplication of effort, and the illusion that nothing is being done to address the problem. Specific examples of fragmented efforts to address FDP&E-related problems include (1) the development of deployment-related automated information systems (AIS) and (2) initiatives to consolidate and standardize FDP&E-related training and education (T&E) within the Marine Corps.

Some critical deficiencies have gone largely unaddressed

While it is true that efforts have been under way to address some problem areas in recent years (albeit with little success), other critical aspects of FDP&E have received scarce attention or visibility. The most notable example concerns the lack of attention to FDP&E-related doctrine, policy, and procedures. One key implication is that on-going efforts to address problems suffer considerably due to this inattention. For example, efforts to standardize T&E curriculum on FDP&E within the Marine Corps are stymied if standard FDP&E-related policy and procedures do not exist.

There has been no advocate for FDP&E within the Marine Corps

Within the Marine Corps, there has been considerable confusion over who should be responsible for what FDP&E-related functions. Our research shows that force deployment is generally considered the logisticians' responsibility (when in reality, it requires full participation and cooperation among operators, planners, and logisticians). This confusion has numerous implications. Most important, there is no clear "end-to-end" FDP&E process owner (at either operational commands or HQMC). As a result, some problems don't get fixed because everybody views FDP&E as someone else's responsibility. Other implications are more operational, such as when logisticians and planners make key operational decisions.

Levels of expertise in FDP&E are inadequate

Our research found a serious deficiency in the number of Marines that hold even a rudimentary level of understanding of the FDP&E process. Marines who are filling FDP&E-related billets (that is, billets that require some level of understanding of the FDP&E process) often arrive unprepared, with little training or education on the FDP&E process or the related systems. This general lack of expertise can be traced to a number of factors: ineffective personnel management; inadequate T&E; and non-existent or inadequate doctrine, policy, and procedures.

How it's supposed to work

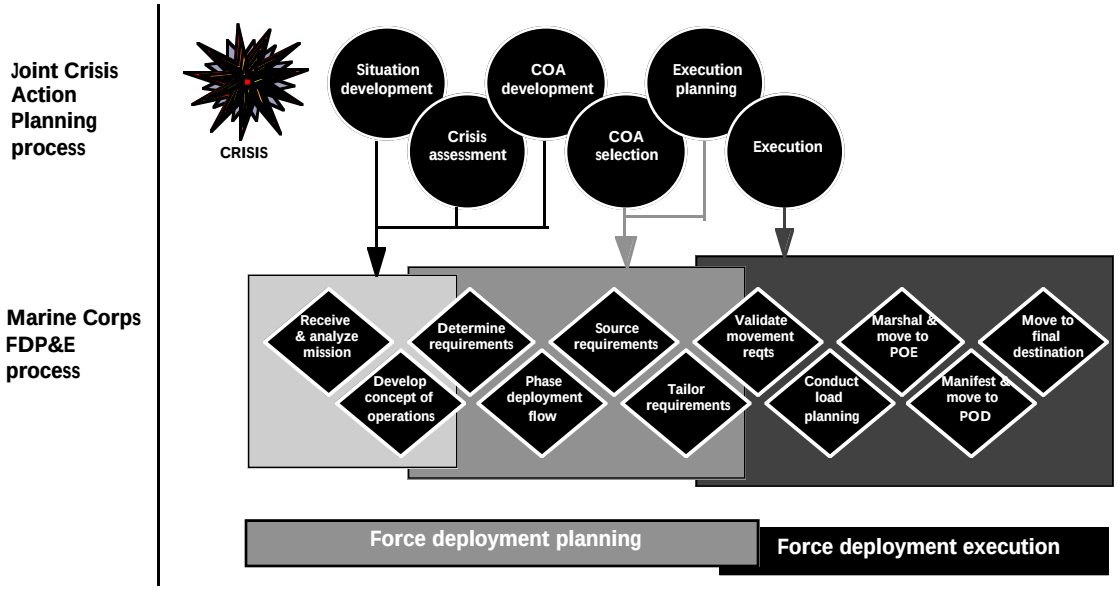
For more on the Marine Corps process see volume II Appendix A.

In this section, we discuss how the FDP&E process is supposed to work *in theory*. The *planning* aspect of FDP&E focuses on developing a deployment plan that ensures that the arrival of combat power supports the commander's operational plan. The *execution* aspect of FDP&E focuses on the mechanics of moving Marines and their equipment from their bases and stations to the theater of operations and on to the tactical assembly areas.

Figure 1 illustrates the top-level FDP&E process. We used three sources to develop our model of the FDP&E process: *The Marine Corps Planner's Manual* (MCO P3000.18), the draft *Deployment Support Procedures Manual* developed at MARFORLANT, and U.S. Commander In Chief Transportation Command's (USCINCTRANS') *A Case for Change* (see [3, 4, 5]). The overlapping diamonds, circles, and squares in the figure convey the fact that these activities often occur simultaneously (especially in a short- or no-notice contingency).

For the purposes of this discussion, we assume that the supported CINC has decided to form a JTF, with the nucleus of the JTF coming from one of the major commands at the corps, Marine Expeditionary Force (MEF), or numbered fleet or air force level. We also assume that the scenario is a real-world, short- or no-notice crisis response, and the deployment of military forces is imminent. In the remainder of this section, we discuss each of the activities associated with the force deployment process in detail. Table 1 summarizes these activities, along with their associated tasks.

Figure 1. Marine Corps FDP&E process in theory



Receive and analyze the mission

Receiving and analyzing the mission includes those tasks associated with the initial stages of planning. An event has occurred that calls for the potential deployment of a JTF. The situation develops and the crisis is assessed to the point where the supported CINC is confident planning should begin on the development of possible military courses of action (COAs). At this point, he issues a mission statement in some form to his service component commanders. The CINC's initial mission statement could be either a written alert order, or a verbal head's up to his service component commanders.

At this point, the CINC service component commanders support the CINC's mission analysis by activating their planning teams or crisis action teams (CATs) and setting the force deployment planning process in motion. Beneath the service component command, each level of command activates an appropriate crisis action team. With the help of planners from the major commands (for example, the MEF or a numbered fleet), the supported CINC service component commanders analyze the CINC's mission to determine specified and

Table 1. FDP&E process in theory: major activities and associated tasks

Top level activity	Associated tasks
Receive and analyze mission	Establish & monitor newsgroups in GCCS Prepare TPFDD LOI Activate Operations Planning team Conduct mission analysis
Develop concept of operations	Develop preliminary CONOPS Develop restatement of mission Develop hard copy tasking to execute mission
Determine requirements	Perform initial force & sustainment sizing Conduct transportation capability study Activate JTF and crisis action teams
Phase deployment flow	Provide commander's estimate and COAs Issue warning orders Report to JTF commander for planning Develop/refine requirements & TPFDD Draft OPLAN
Source requirements	Source forces Forward unsourced requirements Conduct risk assessment Distribute deployment/execute orders
Tailor requirements	Refine and forward lift requirements Alter phasing or reprioritize phasing
Validate movement requirements	Verify and consolidate requirements Verify TPFDD information correct Validate transportation requirements
Allocate units to lift and load plan	Schedule lift and publish movement schedules Conduct load planning Reconcile discrepancies Conduct origin theater activities
Marshal and move to POE	Marshal forces for movement Move to the POE and monitor movement
Manifest and move to POD	Manifest and reconcile discrepancies Move to the POD and monitor movement Report departures & arrivals
Receive and move to final destination	Conduct RSO&I

implied tasks. Each commander ensures that communications connectivity is established up and down the chain of command using the Global Command and Control System(GCCS).

As soon as possible in the joint crisis development and assessment phases, the supported CINC publishes his Time-Phased Force and Deployment Database (TPFDD)[3] Letter of Instruction (LOI), which provides deployment planning guidance to his service component commanders, the services, supporting CINCs, and other agencies. The CINC service component commanders ensure that the LOI is received at each appropriate level within their forces. Throughout the planning process the service component commanders also ensure transmittal of any additional planning guidance, warning orders, or alert orders received from above.

Planning continues at both the service component headquarters and the major command headquarters to assist the supported CINC with the development of his COAs. The CINC service component commanders advise the supported CINC on service capabilities to support probable COAs as they are developed; assessments of supportability are prepared at the lowest level in the service chains of command and forwarded to the major commands.

Develop the concept of operations

The focus on these activities is on the development of a concept of operations and the refinement of the mission. As soon as possible in the process, the CINC service component commanders issue planning guidance to their major commands at the corps, MEF, or numbered fleet or air force level. The proper-size force for the anticipated operation should be determined quickly so the deploying commanders can be designated. At the same time, the mission should be properly analyzed before any requirements are determined.

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3. The TPFDD is a database that identifies not only what units are being deployed, but also what they are bringing with them, where they are going, and when they are going. It provides a “common script” that is used by all players to orchestrate the deployment of forces into theater.

Once the deploying force command element (CE) is constituted or designated, detailed planning can begin on the concept of operations, which is the focus of this activity and the responsibility of the deploying force commanders. If the supported CINC has already established the JTF for the operation, the deploying force commanders (usually the component commanders under the JTF) would report to the joint force commander for planning. It is possible that the situation will have developed to the extent that the deploying force size can be specified in the CINC service component commander's initial planning guidance. If not, the decision must come as soon as analysis of the mission is sufficient to determine the tasks.

At the major command level, planning focuses on helping the deploying force develop its concept of operations. This concept is a statement of a commander's assumptions and intentions with regard to the overall picture of the operation he expects to conduct. At this point it is not specific with regard to forces. Commanders at the numbered fleet or MEF level review existing plans and their associated TPFDDs to determine whether they apply to the developing situation and the mission as articulated by the supported CINC. These commanders then issue planning guidance and help the deploying force commanders develop their concept of operations by reviewing documentation as it is published by the deploying force.

Deployment support organizations are activated at each level of command if it was not done earlier. Bases and stations establish operations support groups to coordinate their activities with those of the deploying units. As forces get closer to execution, the support units will establish control groups at the airfields and ports that will serve as the aerial and sea ports of embarkation (APOE and SPOE).

Based on the emerging concept of operations, the supported CINC develops a restatement of the mission for the service chiefs, the CJCS, and the National Command Authority (NCA). Input from these organizations is then used to update and revise the mission as required.

Determine requirements

The activities associated with determining requirements include determining the proper size of the force for the operation, and computing the deploying force's sustainment requirements. If not already accomplished, the CINC service component commanders (with input from their subordinate commanders) must now help the supported CINC and the supported JTF commander determine the proper size of the deploying force for the operation and clarify command relationships (not only joint relationships but also those within the service command structure). Once the deploying force commanders have published their concepts of operation, the major commands help determine force and sustainment requirements to accomplish the mission. Once requirements have been determined, the deploying force commanders determine the optimal task organization for their deploying forces.

With the assistance of higher headquarters staffs, the deploying force planners (who have reported to the JTF for planning purposes) create a plan from the concept of operations, and develop an appropriate force structure to support that plan using the available automated tools. This is done by creating force records by unit line numbers (ULNs), and using notional data from existing databases. Planners use other automated systems to compute deploying force sustainment requirements based on the force structure. The resulting force structure initially reflects the notional force and sustainment capability that the deploying commanders deem necessary to complete the assigned mission. It does not yet provide actual unit cargo and personnel data for determining lift requirements.

During this phase in the deployment process, USCINCTRANS conducts its initial capability study using the initial force sizing. This capability study includes an assessment of force, time, location, and transportation factors.

Phase deployment flow

Phasing the deployment flow includes determining the order in which units of the deploying force should arrive in theater to ensure

that the deployment concept supports the joint force commander's concept of operations. The supported CINC service component commanders issue additional planning guidance as required, along with guidance for the development of the TPFDD and procedures for the use of Joint Operation Planning & Execution System (JOPES). The deploying commanders, assisted by higher headquarters staffs, determine the order in which units of the deploying force should arrive in theater, and develop their force's organization for deployment. The deploying force's preferred phasing is reflected in the TPFDD by assigning planned movement dates from the origin (bases and stations) to the port of embarkation (POE) and on to the port of debarkation (POD) and the final destination.

The deployment dates (from the origin to the final destination) are associated with the ULNs, which comprise the force list in the deployment plan. It is particularly critical that the phased deployment flow is analyzed to ensure it adequately supports the deploying commanders' plans for the employment of their forces once in theater. The TPFDD is reviewed in this respect at each successive level of command above the deploying unit. These inputs provide the basis for the developing operations plan (OPLAN).

While phasing is being accomplished by the deploying commanders, commanders at the major command level analyze the capacity of designated bases and stations to handle the throughput requirements that will be laid on them during the deployment. This includes facilities available for support at these intermediate stops, as well as the adequacy of planned security measures.

Source requirements

Sourcing consists of associating actual units to the ULNs in the plan by entering the unit's unit identification code (UIC) to the record. Sourcing also includes identifying and forwarding unsourced requirements. The deploying forces submit their proposed force structure (including any requirements for reserve forces) to the major commands for approval and subsequent tasking. At the deploying unit level, notional cargo and personnel data are replaced with accurate, up-to-date lift data from the unit's embarkation database. The units

then forward their sourced plans, which are then consolidated and forwarded to higher headquarters.

While the plan is being sourced at the unit level, other activities are ongoing or have already been accomplished. The major commands at the MEF and numbered fleet level direct their major subordinate commands to transfer units as required to the deploying force commander. The major commands initiate procedures for the release of war reserve material as necessary for sustainment.

At this point in planning, an important task is identifying force and sustainment shortfalls. Unsourced requirements are identified at the deploying force level and passed up the chain to higher headquarters at the major command level. These commanders fill from their assets to the extent possible, forwarding the remainder to the supporting service component commanders. At this level, unsourced requirements are first filled from force-wide assets, and then requests are made for withdrawal of prepositioned war reserve (PWR) for sustainment and for assistance from service headquarters to fill remaining force shortfalls. If essential requirements are still unfilled by either sustainment or force assets, the appropriate requests are passed to the supporting CINC and possibly on to the supported CINC for joint resolution.

The CJCS then directs the supported CINC to perform a risk assessment based on sourced forces, shortfalls, and additional information (such as new intelligence information). Supporting CINC service component commanders and the JTF commander also participate in this risk assessment. The supported CINC then resolves deficiencies, reprioritizes, or adjusts the concept of operations to incorporate the relevant factors.

Tailor requirements

Tailoring is the final determination of exactly what each unit commander intends to take with him when his unit deploys. Tailoring focuses on two activities: refining and providing accurate lift requirements, and altering the phasing of forces into theater as required.

These activities are accomplished by the JTF commander and his component commanders.

Ideally, a unit's embarkation database is current enough so that upon sourcing, the unit requirements can be tailored to reflect an accurate mount out list of equipment and supplies as well as an accurate personnel mount out roster. This is seldom the case. For one thing the actual quantity of prescribed loads and accompanying supplies will change to meet alternative missions and tasks, as well as the inevitable constraints of lift. For these reasons tailoring is listed as an activity separate from sourcing. There is also an aspect to tailoring that involves adjusting the flow of forces by making actual changes to the TPFDD based on changes in the developing tactical situation. Once fully sourced and refined, the TPFDD can be used by USCINCTRANS to calculate gross lift requirements in support of deployment planning.

Validate final movement requirements

The next major activity in the deployment process is validating final movement requirements. The validation process includes verifying that the stated requirements are still required, and verifying that the TPFDD information is correct and free from all logical and fatal errors. The execution phase begins with the decision to execute an operation for which planning has been ongoing for some period of time. At this time the concept of operations is refined into an OPORD. When the NCA decides to deploy the joint force, a CJCS execute order is transmitted to the unified CINC, who in turn directs the deployment of the joint force.

At the supported CINC's order, the supported CINC service component commanders direct the actual deployment of forces. If not done already, the deploying force commanders take operational control of their forces. The first increment of the TPFDD for the deploying forces must now be validated in JOPES to enable USCINCTRANS to actually schedule lift assets against those movement requirements. The first increment of the TPFDD includes the first 7 days of airlift and the first 30 days of sealift. Final validation begins at the deploying unit level and progresses up the chain to the CINC service

component headquarters, where it is entered into JOPES. This validation process involves four key steps.

First, the supported employing unit commanders validate that the force and sustainment requirements reflected in the TPFDD accurately identify the type of forces/sustainment required, as well as when and where the forces and sustainment are required. The mode and source of transport to the POD is also validated. Second, the deploying unit commanders validate that the force and sustainment sourcing of requirements reflected in the TPFDD accurately identifies: (1) the detailed cargo and personnel of the deploying unit; (2) when and where the forces and sustainment are moving from the origin to the POE; and (3) the mode and source of transport from the POD to the tactical assembly area and final destination.

Third, the supported employing unit commanders certify that the validation by the supporting commanders is consistent with their requirements to the supported joint force commander. Finally, the supported CINC validates the entire requirement to the appropriate lift provider for lift scheduling. Throughout the process, the use of GCCS newsgroup messages helps to expedite all the actions associated with validation.

Liaison elements are now established at the POEs by the deploying forces and their deployment support organizations. These organizations finalize contracts and schedules for moving forces from origin to the POE. If organic airlift is being used, the deployment support organizations schedule organic tactical aircraft and lift assets for self deployment, being careful to coordinate arrival times in theater with the final validation of the TPFDD.

Finally, if not conducted earlier, planning now takes place for the movement of deploying units from the POD to the final destination in the theater of operations. This planning is done by the deploying commanders with assistance from higher headquarters as necessary.

Allocate units to lift and load plan

As we move into the execution phase, activities become focused on the deploying units. The CINC service component and major command planning staffs monitor the execution, providing direction and assistance when needed, and scheduling required lift with USCINCTRANS and other lift providers. Deployment support organizations coordinate and direct the physical movement of forces. The key activity in this period is load planning, which is done at the deploying force level. Once USCINCTRANS and other lift providers schedule lift against the first increment of the TPFDD, the deploying force planners allocate ULNs to those specific carriers. Planners also conduct aircraft and ship load planning.

Deploying force planners allocate their individual units to available lift and plan the actual loading that will take place at the POEs. They also provide final lift data to the deployment support organizations, which have responsibility for finalizing the convoy schedules for the movement of units from origin to the POE.

These deployment organizations also plan the actual movement. Once load planning is completed at the deploying force level, it is reviewed for accuracy by the deployment support organizations, and any outstanding lift shortfalls based on the first increment assignments of lift are forwarded up the chain from the major command to the CINC service component where they are reflected in JOPES. In addition, the major subordinate commands are busy arranging for the orderly disposition of the remain behind equipment (RBE) based on prior planning.

Marshal and move to POE

During this phase the lead units of the deploying force marshal at their bases and stations, where they are inspected and then transported to the POE. Upon arrival at the POE, the deploying units stage in preparation for boarding the ships and planes that will transport them to the theater of operations. Movement from origin to the POE is coordinated and controlled by the deployment support organizations.

Standing contracts for commercial transportation are now executed, and frag orders are issued to those units owning required movement support assets. As the deployment progresses successive increments of the deploying force marshal, move, and stage in order. The TPFDD continues to be validated at all levels in successive increments in the same manner as the first increment.

During the actual movement, the deployment support organizations supervise the activities of liaison groups at the various railheads, seaports, and airfields where embarkation takes place. Automated in-transit visibility (ITV) tools are used frequently by operators and transportation managers at the various deployment support organizations throughout this phase: these tools generate frag orders for tasking lift assets organic to the force; they are designed to be used by units at nearly every level to monitor the status of the movement; and they are used by the deployment support organizations to interface between the moving unit and USCINCTRANS's subordinate commands.

Manifest and move to POD

As the units arrive at the POE, the deploying forces finalize the manifests. As units actually board transportation each ULN is recorded and the manifest data are uploaded into JOPES. At the proper time in this process, self-deploying aircraft and lift assets depart for the operational theater, using a combination of intermediate bases and enroute air refueling.

Manifest information is also available to USCINCTRANS to enable the most efficient use of transportation assets when changes are made. Movement visibility is available to all levels of the joint deployment community when the data in service ITV systems are exported to the Defense Transportation System (DTS), where it is then displayed on the Global Transportation Network (GTN).

Receive and move to final destination

As the deploying units arrive at the POD, these ITV systems are used again to support the movement to the final destination. Deployment

support organizations also coordinate in-theater transportation support as required. Because distance and the difficulties of long-range communications are obvious problems throughout this phase, prior planning is critical.

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Some common pitfalls to avoid

In the previous section, we discussed the FDP&E process as it's supposed to work in theory. But what's supposed to happen in theory is often quite different than what actually happens in practice. In this section we discuss some of the recurring problems that operational-level commands have experienced in recent operations. Being aware of these common pitfalls and taking steps to avoid them will help commands in their efforts to improve their ability to conduct force deployment operations. In a later section, we will talk about some specific steps operational-level commands can take to avoid these pitfalls.

We generated this "top ten" list of common pitfalls to avoid based on our background research and our analysis of the FDP&E process in practice. The only specific criteria for inclusion on the list was that different commands tend to make these mistakes consistently from operation to operation.

Focusing prematurely on sourcing and phasing

Our research shows that a number of force deployment planning activities are often accomplished in the wrong sequence. For example, we found that the tendency during crisis action planning is to immediately identify units for the mission, even though actual requirements might not yet be developed. This premature focus on sourcing can ultimately result in the development of a force list that doesn't provide the capabilities required to support the emerging concept of operations.

Similar problems can occur when units focus prematurely on phasing forces into theater without adequately addressing the requirements development process. Commands that make this mistake run the risk of developing a deployment plan that doesn't support the operational plan.

Providing inadequate TPFDD development guidance

Another common pitfall concerns inadequate deployment planning guidance. During the initial stages of planning, the supported CINC is supposed to develop and disseminate a TPFDD LOI that provides guidance on how deployment planning will proceed. Oftentimes, this guidance either:

- Doesn't get passed down to the appropriate levels of command
- Differs from one CINC to the next
- Arrives too late in the planning process to be useful
- Doesn't get developed at all.

We have two examples that help illustrate our point. First, we found that deployment planning guidance can differ considerably from one CINC to the next. Examples of differences include guidance on building the ULN matrix and entering sustainment into the TPFDD, as well as required level of detail for TPFDD data. The end result is a lack of standardization across geographic theaters when building TPFDDs. This deficiency is currently being addressed with the development of a generic CINC TPFDD LOI that attempts to bring some commonality to TPFDD-building procedures such as TPFDD development, validation, scheduling, allocation, and manifesting procedures. The CINCs and their service component headquarters are currently reviewing this deficiency.

Our second example concerns deployment planning guidance that arrives too late in the planning process to be useful. One oft-cited example was the recent deployment of the Special Purpose Marine Air Ground Task Force (MAGTF) to Liberia. After-action reports and Marines involved in the planning for the Liberia operation noted the lack of guidance for TPFDD planning from higher headquarters as a key problem throughout deployment planning.[4]

4. This information is based on interviews we conducted with Marines who participated in the planning for the Liberia operation.

Entering inaccurate data into deployment databases

Deployment databases that don't accurately reflect what units will actually be taking with them when they deploy is another key problem area. The state of a unit's deployment database prior to a crisis is a key indicator of how smoothly the deployment will proceed. This problem manifests itself in a number of ways:

- Databases with incomplete or missing data
- Outdated databases that haven't been updated recently
- Databases with data at the wrong level of detail.

For example, the TPFDD for Desert Shield was filled with inaccuracies. Some examples include "listing of equipment that had been phased out years earlier and scheduling of units that no longer existed [5]."[5] These inaccuracies caused confusion, frustration, waste, and inefficiencies during the early phases of the deployment flow. During Uphold Democracy in 1994, the TPFDD for the deployment to Haiti was incomplete and missing data. As a result, "units requiring movement were either overlooked or erroneously recorded as having been moved. Similarly, units that had actually been moved were being scheduled against future airlift [5]". As a final example, during Joint Endeavor, one-third of the Army air movement requests were invalid due to errors or missing data [6].

In each of the examples cited above, deploying units found themselves in the position of having to update and rectify deployment databases while simultaneously conducting deployment planning in a crisis action mode. Force deployment operations are difficult enough without the added complication of having to correct and update obsolete databases. These recurring problems highlight the importance of reviewing deployment databases, and updating them on a regular basis.

5. After action reports and lessons learned from Desert Shield also report similar problems.

Not validating the TPFDD properly

Validation is a critical step in the deployment planning process. As mentioned previously, validation includes verifying that:

- Force and sustainment requirements reflected in the TPFDD accurately identify the type of forces and sustainment required, as well as when and where the forces and sustainment are required
- Mode and source of transport to intermediate and final destinations are accurate
- Detailed cargo and personnel listings of the deploying unit accurately reflect what deploying units will be taking with them.

A review of Marine Corps and joint lessons learned from past operations shows that TPFDDs are frequently passed up the chain without proper validation. Many commands simply assume that subordinate commands have validated properly. The end result is that inaccurate data remain in the TPFDD, and decisions on what lift to send where are made based on these inaccurate data. In addition, fatal and logical errors (such as earliest arrival dates that are later than the latest arrival dates) also get passed up the chain. Ultimately, improper TPFDD validation results in suboptimal lift and the delayed arrival of forces into theater.

Using standard data instead of actual unit data

Improper use of standard or notional data (generic-type unit data such as unit type code (UTC) data) is another prevalent problem during deployment planning. In past operations, our research shows that some units never replace standard data in the TPFDD with actual unit data once sourcing has occurred. Sometimes this is due to ignorance; other times it is due to short turnaround times during the crisis action planning process.

As a result, “higher headquarters often validate movement requirements data for a generic-type unit (such as an infantry battalion) before the specific battalion actually alerted to deploy can develop its

actual unit equipment list [5]." Transportation schedulers then use these inaccurate data to plan lift allocations and schedule lift. This can result in frustrated cargo (cargo left on the port or pier that couldn't be fit on the aircraft or ships), or ships and planes that are no longer filled to capacity.

Building unofficial off-line TPFDDs

Our research also shows a consistent pattern of commands building off-line TPFDDs instead of managing their TPFDDs in JOPES, with the intent of "melding" the off-line TPFDD with the master one in JOPES later in the planning process. There are two problems with this approach: no other command has visibility on the TPFDD, and melding TPFDDs frequently results in contaminated or missing data.

For example, during Desert Shield, the Marine service component command under the Commander in Chief, Central Command (CINCCENT) had to meld TPFDDs from the 7th Marine Expeditionary Brigade (7th MEB), 1st MEB, and the I MEF CE. Lessons learned from this operation show that such melding often created data problems in the master TPFDD. Similar problems were experienced during Uphold Democracy [7].

Using non-JOPES lift

Another prevalent problem concerns the use of non-JOPES lift, which involves going outside of normal channels to get lift. This is often driven by a concern that the "system" won't respond in a timely manner, and thus units won't get the lift they need when they need it. The implications include reduced ITV and suboptimal lift. We have two examples from recent operations that help to illustrate this problem.

In February 1991, over 525,000 personnel had already deployed to the Middle East as part of the Desert Shield buildup. But the deployment had not gone smoothly. In fact, General Schwarzkopf was concerned that units and personnel deploying to the Middle East were not following established rules for arranging lift via JOPES. He noted, "since 16 January our personnel strength [in theater] has increased by 71,800 and now stands at 525,920. I am concerned that 20 percent

of that increase was not in the TPFDD and therefore unplanned and invisible to this headquarters [8]." He proceeded to impose a theater ceiling, and delineated specific guidelines to ensure procedural compliance with established processes and procedures for deploying units into theater. One such guideline was to direct USCINCTRANS not to flow any unit or individual unless it was properly entered into the TPFDD.

Another example concerns the 1993 Somalia deployment in support of Restore Hope. A TPFDD was developed and validated by the supported CINC and USCINCTRANS. The air movement portion of the TPFDD was then scheduled. However, "a supporting command (which was part of the validated force package), without the knowledge of the supported CINC or USCINCTRANS, directly scheduled special assignment airlift missions to airlift itself to Somalia. The resultant double scheduling of a portion of the force package unfortunately was not realized until execution [5]." This use of non-JOPES lift resulted in a significant amount of confusion, as well as lost visibility over the flow of this part of Somalia's force package.

Making unauthorized post-validation TPFDD changes

History also shows a consistent pattern of changes to the TPFDD after validation has occurred. In operations, the underlying causes of these post-validation changes fall into three categories:

- *Necessary and unavoidable* changes, such as when commands get new information on the situation, mission, or support after TPFDD validation.
- *Necessary but often avoidable* changes, such as when the original TPFDD input was incomplete or inaccurate, and requires correction.
- *Unnecessary* changes, such as when commands "tinker" with the TPFDD at the last minute to make minor changes.

Our concern focuses on those changes that are necessary but often avoidable (due to inadequate or improper validation), or unnecessary changes that are made *without the requisite authorization*. In most

cases, our research shows that military personnel know the proper procedures for post-validation changes and can follow them, but choose not to because they believe the process will actually work better for them if they don't. Such unauthorized TPFDD changes after validation can result in frustrated cargo as lift does not arrive, as well as diversion of lift from other commands.

An example from Restore Hope helps to illustrate this problem. Frequent, unauthorized last-minute changes to the TPFDD forced LtGen Johnston (the Commander of the JTF for Somalia) to send a message designed to reinforce proper TPFDD procedures. This message stated that "the JTF continues to experience excessive changes to the TPFDD which causes backlogs and disrupts planning. These changes appear to be the effect of poor planning [9]." The message also stated that units failing to comply with established procedures would be removed from the deployment flow and would have to be resubmitted for consideration. As another example, the TPFDD for Joint Endeavor was changed on average 14 times per day for the first few weeks of the operation [6].

Making unauthorized changes at the POE

Unauthorized changes at the POE include units bringing more or different personnel and cargo to the POE than what was planned in the TPFDD, or units changing the load plans upon arrival at the POE. Our research shows that units usually make changes at the POE rather than make post-validation changes to the TPFDD because they believe TPFDD changes will not be permitted. In other cases, unit commanders are simply risk-adverse, and have a higher comfort level if they bring more equipment. We have a number of examples that illustrate this problem.

During Desert Shield, USCINCTRANS dispatched two commercial carriers to Shaw Air Force Base based on a validated requirement for passenger lift. Once the carriers arrived, they found that only one aircraft was needed to lift the passengers that had actually arrived at the POE for movement [5].

During Restore Hope and Vigilant Warrior, there were recurring problems with uncoordinated and invalidated ULNs (a record in the TPFDD that identifies a specific unit or force and its equipment for movement) appearing among the ULNs that had already been validated in the TPFDD. In these cases, USCINCTRANS either used more assets than necessary or applied available airlift inefficiently [5]. Similar problems were reported during Desert Shield [10], Joint Endeavor [6], and Uphold Democracy [11, 12].

Failing to properly manifest units

A final mistake commonly made during force deployment operations is failing to properly manifest units, which can result in severely reduced ITV. This includes:

- Inaccurately manifesting units (the manifest doesn't match what was loaded on the aircraft or ship)
- Failing to load manifests into JOPES
- Failing to develop a manifest at all.

Examples of this problem can be found in the Restore Hope experience. During the Somalia operation, manifests were often not entered into the system and as a result, units would arrive in Somalia to the complete surprise of the in-theater personnel. At other times, changes to load plans or bumping of units and equipment from one flight to another occurred without subsequent changes to the manifests. In-theater personnel then used these manifests (which reflected what had been planned for the mission, not what was actually on the aircraft) to monitor ITV [13].[6] Other examples of manifesting problems can be found in Desert Shield [14, 15] and Uphold Democracy [16].

6. We should note that one factor that exacerbated the ITV problem during the initial stages of the Somalia deployment concerned the lack of World Wide Military Command and Control System (WWMCCS) capability in-country. After WWMCCS capability was established, the Marines' ability to monitor the flow from in-country greatly improved.

Some special considerations for JTFs

In this section, we discuss some special considerations that operational level commanders and their staffs need to keep in mind when participating in JTF operations. Until recently, commands from the different services exercised and prepared to operate largely with other units from the same service. Since the start of the decade, however, many commands have taken on a new responsibility—that of a JTF. This renewed focus on joint operations has forced many commands to prepare for new roles as JTF staffs. For example, in the Marine Corps' case:

- Commanding General (CG), I MEF has been a CJTF in Restore Hope (Somalia 1992-93) and United Shield (Somalia 1995), as well as in exercises MEFEX 92 and Emerald Express 94.
- CG, II MEF has formed a Standing JTF, and regularly participates as the JTF in some of USACOM's Unified Endeavor exercises.
- CG, III MEF has been a CJTF in Sea Angel (Bangladesh 1991), and regularly participates as a JTF in some of USCINCPAC's Tempo Brave and Cobra Gold exercises (as do other corps and air force commanders in the Pacific).

In some cases, these new roles require staffs to perform unfamiliar functions, many of which are FDP&E-related. As part of our study, we examined whether FDP&E-related problems in a JTF scenario differ from those experienced during more traditional scenarios (such as Desert Shield/Storm). Specifically, we were interested in looking at any unique FDP&E-related problems that might be encountered when different staffs either form the nucleus of a JTF, or become the component under a JTF (such as a service or functional component).

Our principal finding was that the most serious JTF FDP&E-related problems are the same as those faced by the services in non-JTF

contingencies, such as a lack of experienced force deployment planners, inadequate and unfamiliar equipment, and a lack of procedural discipline. We found no evidence that FDP&E staff functions vary considerably when staffs serve as a JTF or in their more traditional roles. However, we *did* identify a number of JTF-unique considerations that operational-level commanders and their staffs need to keep in mind when preparing for JTF operations.

Operational Control (OPCON) of unfamiliar forces

Staffs that form the nucleus of a JTF will also have the additional responsibility of phasing units, and reviewing and validating TPFDD input from other services. These other-service units are often unfamiliar to JTF staffs, which has posed difficulties in the past. This problem can be addressed by ensuring the early deployment of liaison officers (from the supported CINC) to JTF staffs.

Reliance on JTF augmentation

Staffs that form the nucleus of a JTF also require FDP&E staff augmentation from the supported CINC as well as JTF components because of a larger span of control and the need to deal with unfamiliar forces. These augmentees have sometimes arrived late in a fast-breaking contingency. This problem can also be addressed by focusing on early JTF augmentation team deployment.

JTF component deficiencies

When a JTF is formed, the components of the JTF are usually organized along service lines. The component commanders of the JTF might also have OPCON of unfamiliar forces, which means they will experience problems similar to those of the JTF staff. These component command elements will probably also be inadequately staffed to take on these additional responsibilities. For example, during Restore Hope, the 1st Marine Division (MARDIV) staff formed the nucleus of the Marine component staff under the JTF. As the JTF MARFOR, this staff had OPCON of non-organic Marine units such as combat service support and aviation units. The 1st MARDIV staff took on increased

FDP&E responsibilities (including phasing and validating less-familiar forces) even though they only had MAGTF planners and equipment sufficient for their traditional roles.

The nature of recent JTF operations

The history of JTFs and current CINC planning shows that operational-level commands are most likely to serve as JTFs in short-notice operations in which there is no pre-written OPLAN TPFDD. From an FDP&E perspective, this is the worst-case scenario because it necessitates simultaneous planning and deployment, and usually results in hasty TPFDD development. This highlights the need for the development of "off-the-shelf" force modules that apply to the most likely missions for JTFs. It also highlights the importance of well-established standard operating procedures (SOP) for staffs who are likely to form the nucleus of a JTF in a contingency.

Procedural differences in how services approach FDP&E

A final consideration to keep in mind during JTF scenarios is that different services approach some aspects of FDP&E differently. For example, the Army and Air Force often validate TPFDDs at the CINC service component level, and send them directly to the CINC (while the Marine Corps validates at the deploying unit level and above). In this case, the implication is that the JTF may have the opportunity to review the TPFDDs, but may have no formal validation authority. During recent exercises, CINC component commanders have not always been responsive to the more junior JTF commanders on TPFDD matters. However, there is no evidence that this has happened in a contingency. These differences in service philosophies toward FDP&E need to be anticipated and addressed early in the operation. This situation also highlights the importance of disseminating TPFDD LOIs and other deployment planning guidance as early as possible in the contingency.

The nature of these special considerations for JTF operations leads us to conclude that operational level commands that are likely to be involved in JTF operations (and especially those commands whose staff might form the nucleus of the JTF staff) need to ensure that:

- These special considerations are addressed as they develop their SOP for JTF operations
- They prepare for and address these special considerations when the opportunities arise to do so (such as during JTF exercises).

Suggestions for doing FDP&E better

For more on Service HQ recommendations see Vol. 1, p. 77

In this final section, we discuss some specific steps that operational-level commands can take to improve their ability to conduct force deployment operations. Our research shows that one of the keys to successful FDP&E is commander's attention. Without such attention and focus, initiatives to improve FDP&E within commands often languish. That said, there are some specific actions that commands can take to ensure that the FDP&E process works better for them. We summarize our suggestions below.

Establish a process owner for FDP&E

For more on the process owner problem, see Vol. I, p. 56

First, we recommend that commands establish a process owner for FDP&E—one staff section that maintains the responsibility for coordinating and directing all FDP&E-related initiatives within the command. But who should be this process owner? We recommend that the operators (the G/N/J-3s) take responsibility for this important function. In spite of efforts to change perceptions, force deployment is still frequently considered a logistician's responsibility.

But FDP&E done right requires operator involvement—and, more important, leadership—from start to finish. This is certainly the case during amphibious operations, where the operators have primary responsibility for development and prosecution of the landing plan during "ship-to-objective" operations. Force deployment operations should be no different. For this reason, we argue that the operators should be the designated process owner for FDP&E. Of course, logisticians and planners would play a strong supporting role in all FDP&E-related command initiatives.

Clearly delineate staff section responsibilities

For more on the functional responsibilities problem, see Vol. I, p. 49

Our research also shows that one of the reasons things go wrong during force deployment operations is that nobody knows what they're supposed to be doing. In our review of command SOPs and staff regulations, we found few references to FDP&E-related functions, and who should be doing those functions.

One way to clear up the confusion about who should be doing what is to clearly delineate staff section responsibilities for FDP&E, and document those responsibilities in staff regulations, SOPs, and LOIs. To be meaningful, these responsibilities would need to be defined and clearly delineated at a relatively fine level of detail to avoid further confusion. To assist commands with this effort, we have developed a proposed delineation of FDP&E-related functions for three key staff players: operators, logisticians, and planners. This proposed delineation applies to a wartime or crisis scenario. Responsibilities for such functions might differ during peacetime or deliberate planning.[7]

Table 2 summarizes our proposed delineation of functions for wartime or contingencies. This table not only shows who would have the lead, but also who would play a supporting role. It is important to note that "having the lead" does not necessarily mean the lead staff section performs the function. What it does mean is that the lead section is involved (to some degree) in the activity, and is responsible for ensuring that the function gets performed right and on time. The intent here is to provide a baseline or starting point for further discussions and refinements. We see no need for each command to do it the same way. In fact, we would argue that such an approach is counterproductive. However, we *do* see a need for each command to clearly delineate responsibilities across staff sections. We also see a need for greater operator involvement in the substance of deliberate planning, as well as execution planning during contingencies.

7. Later on, we'll discuss the importance of minimizing these differences, to the extent possible.

Table 2. Proposed delineation of responsibility for FDP&E-related functions during contingencies[a]

Function	Operators (G-3)	Logisticians (G-4)	Planners (G-5)
Act as process owner for FDP&E	L	S	S
Act as functional manager for GCCS		S	L
Manage & monitor budgets		L	
Coordinate with responsible agencies	L	L	L
Establish liaisons	L	L	L
Establish & monitor newsgroups in GCCS	S		L
Prepare TPFDD LOI and planning guidance	S		L
Activate OPT, CAT & deployment support agencies	L	L	
Conduct mission analysis	L	S	S
Develop preliminary CONOPS	L	S	S
Develop restatement of mission	L	S	S
Perform initial force & sustainment sizing	L	L	S
Assess transportation feasibility		L	
Provide commander's estimate and COAs	L	S	S
Develop/refine requirements and TPFDD	L	L	S
Task organize & assign forces	L		S
Draft OPLAN	L	S	S
Source forces & sustainment	L	L	
Forward unsourced requirements/resolve shortfalls	L	S	S
Conduct risk assessment	L	S	S
Refine and forward lift requirements	L	S	S
Alter phasing or reprioritize phasing	L	S	S
Verify and consolidate requirements	L	S	S
Verify TPFDD information correct	L	S	S
Validate transportation requirements	S	L	
Schedule organic lift and publish movement schedules		L	
Conduct load planning		L	
Reconcile discrepancies	S	L	S
Conduct origin theater activities	S	L	S
Enforce procedural compliance	L		L
Monitor movement & maintain ITV	L	L	

a. "L" denotes lead responsibility, while "S" denotes supporting responsibility.

Create cross-functional deployment cell

One alternative approach to delineating responsibilities among traditional staff sections would be to establish a separate organization that maintains responsibility for FDP&E-related functions during contingencies and other situations (such as exercise movements). This cell would act as the single agency for coordinating all aspects of deployment operations, to include the phasing of forces into theater, validation of the TPFDD, and coordination of all deployment-related actions within the command.

This cell would be under the staff cognizance of the G/N/J-3 (or alternatively the G/N/J-5 if one exists), and would include representation from all relevant staff sections such as logistics, plans, intelligence, communication, and manpower. It would also include liaisons from deploying forces, as well as liaisons from the service/functional components if the staff forms the nucleus of a JTF. Establishing such a cell could also help address some of the special considerations we highlighted for JTF operations, such as commands having OPCON of unfamiliar forces, the short-notice nature of these contingencies, and the reliance on JTF augmentation. Reference [17] provides an example of such an organization that currently exists at MARFORLANT.

Integrate FDP&E T&E into exercises and routine deployments

For more on the T&E problem, see Vol. I, p. 18

Our research shows that FDP&E has not been well-integrated into exercises and routine deployments. Exercises (both joint and single service) rarely focus on the essential activities associated with FDP&E. Instead, these activities are glossed over. If forces actually deploy for exercises, training rarely focuses on how to get the forces to the exercise. Instead, the deployment becomes administrative. We also found that it is not yet standard practice to use formal FDP&E procedures for routine peacetime deployments.

We suggest that operational-level commands take steps to do a better job of addressing FDP&E during exercises and routine deployments. One approach would be to maximize any opportunities for FDP&E-related training during exercises. For example, when units actually deploy in support of an exercise, commands should treat the deploy-

ment itself as a training event, instead of an administrative movement of forces. In addition, commands should take the opportunity to practice FDP&E procedures during such movements. Also, commands can develop short command post exercises (CPXs) or field training exercises (FTXs) that focus on a specific aspect or problem area of FDP&E. For example, commands could develop a half-day CPX that focuses on the TPFDD validation process by taking an error-filled TPFDD, and actually using the TPFDD to practice validation procedures.

Train as you fight

Another suggestion is to do things the same in peacetime as in wartime, to the extent possible. During the course of our research, we found that who had responsibility for what FDP&E functions often differed considerably, depending on the situation (whether it was deliberate planning, exercise planning, or contingency planning). While we acknowledge that there are good reasons for different staff sections to have responsibility for different FDP&E-related functions in different situations, we suggest that commands delineate functions in such a way that the same people who do it in peacetime are the ones who would execute during contingencies, to the extent possible. This will ensure that those who have to conduct force deployment planning in times of crisis aren't doing it for the first time. It will also ensure greater operator involvement in the substance of deliberate planning, as well as execution planning during contingencies.

Increase FDP&E knowledge and awareness levels

Operational-level commands also need to take the initiative to increase FDP&E knowledge and awareness levels across the command. Our research shows that there are few Marines who really understand the FDP&E process, and how the different systems and tools fit into the process. We suspect the situation is similar for the other services as well. We have a number of suggestions for increasing knowledge levels across the command:

- Leverage any existing opportunities for T&E on FDP&E, such as joint exercises and routine peacetime deployments

- Focus the staff on avoiding the "top ten" pitfalls we discussed earlier in the report
- Prepare the staff for those special considerations that need to be addressed and anticipated during JTF operations
- Provide FDP&E-related professional military education (PME) on a regular basis
- Establish and disseminate standard procedures for FDP&E across the command, and ensure that those procedures are incorporated into existing SOP, staff regulations, and LOIs.

Plan ahead

One of the biggest FDP&E-related problems concerns the state of existing deployment databases. Our research shows that many unit deployment databases haven't been updated in years, and few are scrubbed or reviewed on a regular basis. Without updates, commands run the risk of having to simultaneously fix outdated databases while conducting FDP&E for real-world operations. As we mentioned earlier, the state of a unit's deployment database prior to a crisis is a key indicator of how smoothly the deployment will proceed. We believe that one of the most important actions commands can take to prepare for potential force deployment operations is to have their deployment databases in good order *before* a contingency begins.

Specifically, we recommend that commands:

- Clean and scrub existing deployment databases
- Implement a program to review and update those databases on regular basis
- Develop opportunities to "spot check" the validity of existing deployment databases by holding short- or no-notice exercises where units mount out their gear for deployment
- Build force modules for the most likely contingencies.

Build a cadre of experienced force deployment planners

For more on the personnel management problem, see Vol I, p. 24

Our research also indicates that operational-level commands need to take the initiative to build and maintain a cadre of experienced force deployment planners. We acknowledge that this is not an easy task, given the shortage of military personnel who really understand the FDP&E process. But it's important to try for two reasons.

First, there appears to be a significant amount of turbulence associated with many force deployment-related billets. Turnover is high, and it's difficult to build expertise in such situations. Second, we also found that few officers and enlisted personnel arrive in these billets with the requisite background and training. As a result, they spend a significant portion of their tour learning the job. By the time they have built up sufficient expertise in force deployment operations, they are due to be rotated out to their next billet. This creates a "corporate knowledge" problem at many commands, where the most experienced personnel are only able to apply their expertise for a very limited period of time.

We believe that commands can take a number of steps to address these two problems. First, we recommend that operational-level commands set aside a portion of their force deployment-related billets as "critical" billets that must be filled at all times by personnel who meet certain established minimum qualification standards. This would ensure that these critical billets are filled with qualified personnel who have received adequate levels of FDP&E-related T&E. A similar initiative at the joint level has proved quite effective.

We also recommend that operational-level commands consider civilianizing a portion of their FDP&E-related billets. Shifting a portion of these FDP&E-related billets to civilian billets would provide continuity and expertise, especially if retired force deployment planners with operational experience were used to fill the billets. We would envision the number to be small, and the location to be at the more senior operational-level commands (perhaps one civilian position at each of the major commands and the CINC service component commands).

Use history wisely

Finally, we recommend that commands use history wisely. It can be quite tempting to get lulled into a false sense of security based on past history. For example, history shows that these FDP&E-related problems have yet to have significant operational-level impacts. That is, despite these problems, the military has still managed to get the job done. In short, the military has been *effective*, but not necessarily *efficient*. Part of the reason for this has to do with the nature of recent contingencies. For example, we won't always have the luxury of an enemy that allows us six months to deploy our forces before they have to fight (as was the case in Desert Shield/Storm).

In fact, these problems have the potential to seriously affect future operations, with potentially enormous costs: battles *could* be lost, soldiers *could* be killed, enemy forces *might* not be engaged, and Americans *might* not get evacuated if military forces are not able to deploy quickly and efficiently to get the right forces in the right place at the right time. For these reasons, operational-level commands need to continue building a core competency in FDP&E and addressing existing force deployment problems.

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	Attn: AC/S G-4
	Attn: AC/S G-5
	Attn: AC/S G-6
26V1	EWTGLANT
	EWTGPAC
45A2	CG I MEF
	Attn: COMMANDING GENERAL
	Attn: AC/S G-3
	Attn: AC/S G-4
	Attn: AC/S G-5
	Attn: AC/S G-6
	CG II MEF
	Attn: COMMANDING GENERAL
	Attn: AC/S G-3
	Attn: AC/S G-4
	Attn: AC/S G-5
	Attn: AC/S G-6
	Attn: SJTF
	CG III MEF
	Attn: COMMANDING GENERAL
	Attn: AC/S G-3
	Attn: AC/S G-4
	Attn: AC/S G-5
	Attn: AC/S G-6
45B	CG FIRST MARDIV
	Attn: COMMANDING GENERAL

Attn: G-3
Attn: G-4
Attn: G-6
CG SECOND MARDIV
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6
CG THIRD MARDIV
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6

45Q CG FIRST FSSG
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6
CG SECOND FSSG
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6
CG THIRD FSSG
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6

45V ELEVENTH MEU
THIRTEENTH MEU
FIFTEENTH MEU
TWO TWO MEU
TWO FOUR MEU
TWO SIX MEU
THREE ONE MEU

46B CG FIRST MAW
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6
CG SECOND MAW
Attn: COMMANDING GENERAL
Attn: G-3
Attn: G-4
Attn: G-6
CG THIRD MAW

	Attn: COMMANDING GENERAL
	Attn: G-3
	Attn: G-4
	Attn: G-6
50A	USCINCEUR ECJ1-AAL VAIHINGEN GE
	Attn: J-3
	Attn: J-4
	Attn: J-5
	USCINCPAC HONOLULU HI
	Attn: J-3
	Attn: J-4
	Attn: J-5
	USCINCSOC QUARRY HEIGHTS PM
	Attn: J-3
	Attn: J-4
	Attn: J-5
	USTRANSCOM SCOTT AFB IL
	Attn: JTCC
	Attn: JTO
	Attn: J-3
	Attn: J-4
	Attn: J-5
A2A	USACOM
	Attn: J-3
	Attn: J-4
	Attn: J-5
	Attn: J-7
A6	HQMC CMC
	Attn: DC/S I&L (CODE L)
	Attn: DC/S I&L (CODE LP)
	Attn: DC/S PP&O (CODE PL)
	Attn: DC/S PP&O (CODE PO)
	Attn: DC/S M&RA (CODE MP)
	Attn: DC/S AVN (CODE ASL)
	Attn: DC/S C4I (CODE CS)
	Attn: DC/S PP&O (CODE MC-PP&O)
B2A	JCS
	Attn: J-3
	JCS
	Attn: J-4
	JCS
	Attn: J-5
JOINT	USCINCCENT
	Attn: J-3
	Attn: J-5
	Attn: J-5

MCCDC	CG MCCDC - ATTN: CMCC
	Attn: COMMANDING GENERAL
	Attn: T&E DIVISION
	Attn: MARINE CORPS UNIVERSITY
	Attn: DOCTRINE DIVISION
	Attn: MAGTF STAFF TRAINING PROGRAM
	Attn: STUDIES & ANALYSES DIVISION
MISC	MARFORLANT
	Attn: COMMANDER
	Attn: OPG
	Attn: AC/S G-3
	Attn: AC/S G-4
USMC	HQ, U.S. MARINE CORPS FORCES, EUROPE
	Attn: AC/S G-3
	Attn: AC/S G-4
	Attn: AC/S G-5
	Attn: AC/S G-6
V5	MCAS BEAUFORT SC
	MCAS CHERRY PT NC
	MCAS EL TORO
	MCAS IWAKUNI JA
	MCAS TUSTIN CA
	MCAS YUMA
V16	CG MCB CAMP BUTLER JA
	CG MCB CAMP LEJEUNE NC
	CG MCB CAMP PENDLETON CA
V23	CG MCLB ALBANY GA
	Attn: COMMANDING GENERAL
	Attn: CODE 40
	Attn: CODE 80
V28	COMMARCORSYSCOM QUANTICO VA
	Attn: COMMANDER

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